

Appl. No. 09/803,889  
Amdt. dated October 20, 2004  
Reply to Office action of August 12, 2004

**Amendments to the Claims:**

Please cancel claims 18, 21-23. Please amend claims \*\*, and add new claims \*\* as shown in the claim listing below. All pending and withdrawn claims are listed below. This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-23 (cancelled)

21-23 (cancelled)

24. (Currently Amended) A method of recording aircraft position data comprising:
- providing an onboard flight data recorder unit and a ground-based data retrieving station, wherein said onboard flight data recorder unit is comprised of a single physical enclosure containing a central processing unit, a plurality of sensors for monitoring an aircraft's condition, a global position system (GPS) receiver, a non-volatile memory for recording flight data and a wireless communications transceiver for retrieving said data, said flight data recorder mounted on an aircraft floor or wall;
  - providing a GPS communications antenna;
  - connecting the recorder to the aircraft power supply and ignition switch wherein ~~based on the plurality of sensors the flight data recorder unit does not need to be connected to the aircraft's corresponding flight instruments;~~ and
  - computing the difference between current and previous coordinates generated by the GPS receiver and then storing the difference instead of the coordinates thereby saving memory space.
25. (Previously Presented) The method of claim 24 wherein recorded position data is converted to absolute coordinates by the ground-based data retrieving station by adding a first recorded difference to the initial coordinates resulting in a first absolute coordinate and then adding to it a next recorded difference to produce a second absolute coordinate and so on, wherein said initial coordinates are recorded at the start of every flight.

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26. (Currently Amended) ~~[[A]]~~ The method of claim 24 wherein periodically recording aircraft position and flight data at ~~[[a]]~~ certain time intervals ~~interval~~ which is set before the start of every flight by transmitting a desired interval to the flight data recorder using the ~~wireless communications device of claim 24.~~

27. (Currently Amended) The method of claim 26 wherein a recording time interval can be automatically varied ~~in-flight~~ in flight depending on aircraft speed by:

computing ~~[[the]]~~ a speed of the aircraft by estimating a distance traveled between two points and dividing by a time traveled;

comparing said speed with pre-set values to determine if the aircraft is taxiing, cruising or ~~taking-off~~ taking off or landing; and

setting the time interval to a highest value if the speed is equivalent to taxiing, intermediate value if cruising and a lowest value if taking off or landing.